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REMARKS

Reconsideration and allowance in view of the foregoing amendments and the

following remarks are respectfully requested. No claims have been amended.

Rejection of Claims 1-2, 5-7, 13-14, 17-19, 22-27, 30-31 and 34 under 35 U.S.C. § 102(e):

Claims 1-2, 5-7, 13-14, 17-19, 22-27, 30-31 and 34 are rejected under 35 U.S.C.

Section 102(b) as being anticipated by Chu et al. (U.S. Pat. 5,367,629) ("Chu et al.").

Applicants traverse this rejection and submit that Chu et al. fail to teach each claim

limitation.

We first turn to claim 1. Applicants submit that there are several reasons why claim 1

is not anticipate by Chu et al. Claim 1 requires the step of quantizing the transform

coefficients such that all, some, or none of the transform coefficients become zero. The

Examiner cites element 374 asserting that this corresponds to quantizing the transform

coefficients and cites element 392 as corresponding to quantizing the transform coefficients

such that all, some or none become zero. First, feature 374 is merely a buffer (64x8 RAM)

and not a quantization element. See discussion throughout regarding feature 374 as a buffer

(Col. 13, line 62). The feature 392 merely takes the coefficients from buffer 374 and if the

particular coefficient is non-zero, it outputs a 1 and if it is zero, it outputs a zero. Therefore,

Applicants traverse the Examiner's conclusion that features 374 and 392 perform

quantization as recited in claim 1. There is no quantization performed by blocks 374 and/or

392.

Next, the Examiner asserts that constructing a single entity indicating which transform

coefficients are non-zero is taught by the form vector 404. Applicants respectfully note that

this analysis is incorrect. Chu et al. clearly teach away from the present invention wherein

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they teach that the coefficients coming out of the buffer 374 are utilized to generate multiple

entities - namely the vector pattern VLC 406 *and* the coefficient VLC 408. Col. 14, lines 43 -

45 explain: "In this manner, a two-dimensional 8x8 quantized DCT coefficients are mapped

into a one-dimensional vector and coefficient VLC." Accordingly, Applicants respectfully

submit that it is clear that two entities are generated and discussed by Chu et al., who

therefore cannot anticipate claim 1 which recites constructing a single entity. The form

vector 404 shown is utilized by Chu et al. to generate the vector pattern VLC, which is only

one of the two VLC vectors taught by the reference.

The Examiner next asserts that the step of coding the single entity as an integer using

an arithmetic coder is taught by the vector pattern VLC which the Examiner states is "one

kind" of arithmetic coding. Applicants traverse the Examiner's equating the VLC with

arithmetic coding. As stated in EP 1333679, "Encoding using VLC tables is very simple

since encoding simply comprises the indexing of a large table with an entry for each possible

symbol." However, arithmetic encoding is explained as a "method of encoding data using a

variable number of bits. The number of bits used to encode each symbol varies according to

the probabilities assigned to that symbol." See EP 1333679, Background of the Invention

Section.

Clearly, Chu et al. focus on the VLC method in which they discuss the lookup table.

Col. 14, lines 41-42. Since the VLC method differs from arithmetic encoding, Applicants

traverse the Examiner's statement that the VLC taught by Chu et al. is simply "one kind" of

arithmetic coding and thus matches this claim limitation. Applicants submit that it is not that

same type of coding as arithmetic coding and thus this claim limitation is not taught or

suggested by Chu et al.

Accordingly, Applicants respectfully submit that there are several areas in which the

Examiner's comparison of claim 1 with the teachings of Chu et al. are incorrect and that this

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reference simply does not teach each claim limitation. Therefore, claim 1 is patentable and in

condition for allowance.

For the same reasons set forth above, Applicants submit that claims dependent claims

2 and 5-7 are also patentable.

Independent claims 13, 23 and 30 are also patentable for the same reasons as well as

their respective dependent claims 13-14, 17-19, 22-27, 30-31 and 34.

Rejection of Claims 3-4, 10, 15-16, 20-21, 28-29 and 32-33 under 35 U.S.C. § 103(a)

The Examiner has also rejected claims 3-4, 10, 15-16, 20-21, 28-29 and 32-33 under

35 U.S.C. Section 103(a) as being unpatentable over Chu et al. in view of Morihara, et al.

(U.S. Pat. 6,542,6 40) ("Morihara et al."). Applicants traverse this rejection and submit that

the claims are patentable over the combination of these references.

Notably, Applicants submit that given the above analysis in which we identified how

the primary reference of Chu et al. fails to teach each claim limitation of the parent claims,

Applicants submit that these dependent claims are patentable over the combination of Chu et

al. and Morihara et al.

Furthermore, Applicants submit that by a preponderance of the evidence, one of skill

in the art would not find motivation to combine Chu et al. with Morihara et al. Chu et al., as

their title indicates, relates to digital video compression system. As the background of the

invention introduces, Chu et al. state that their invention relates to encoding and decoding

video information and specifically to a technique that allows for full-duplex transmission of

video over ordinary analog telephone lines. Accordingly, the focus is clearly on video its

compression and transmission over a 14.4 kbps bandwidth.

In contrast, Morihara et al. focus on a dictionary in which a character train serving as

a processing unit upon compression has been registered and stored in a storing unit. Abstract.

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The cover of their patent shows a character train dictionary storing unit 14 providing input to

the character train comparing unit 12. As one of skill in the art would begin to read Morihara

et al., he or she would in the first paragraph of column 1 be able to identify that this invention

relates to a method of reconstructing a document formed by character codes of languages

such as Japanese, Chinese, Hangul or the like. Accordingly, the differences lie in the fact that

Morihara et al. focus on documents and not video and a particular type of character typical of

Japanese or Chinese characters. The Examiner asserts that one of skill in the art would be

motivated to combine these references because they are from the "same field of endeavor

(data compressing and reconstructing apparatus)." Applicants traverse this reasoning because

all the teachings of the prior art must be considered. It is the Examiner's burden to provide a

"convincing line of reasoning as to why the artisan would have found the claimed invention

to have been obvious in light of the teachings of the references." MPEP 2142.

Applicants respectfully submit that while each reference may relate to compression,

merely the fact that these references can be combined (which is not conceded), there still

must be some suggestion or motivation to do so. MPEP 2143.01. Where all of the teachings

of the prior art references must be considered for their suggestive power to one of skill in the

art, Applicants respectfully submit that one of skill in the art would not find motivation for

combining Chu et al. with their video over telephone lines focus with Morihara et al. which

focus on a non-video document compression for Asian languages. In other words, if one of

skill in the art was reviewing Morihara et al. and focusing on document compression in Asian

languages, what would prompt that person to look for information within Chu et al. wherein

it relates to video compression? Applicants submits that by a preponderance of the evidence,

one of skill in the art would recognize the different technical needs between these two

approaches and not have the requisite motivation.

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Furthermore, Applicants note that the Examiner on page 4 of the office action states that Chu et al. "provides for coding the single entity ... as an integer using an adaptive arithmetic coder (Fig. 13, element 406)". As discussed above, Applicants traverse this analysis in that Chu et al. only teach a Huffman coding (Col. 14, line 46) and coefficient variable length coding and not arithmetic coding. Thus the Examiner is incorrect in this assertion. Where Chu et al. teach Huffman and variable length coding, Morihara et al. also teach Huffman coding in Col. 1, line 56. Accordingly, the use of Huffman coding (VLC) cannot be the basis for motivation to one of skill in the art since Chu et al. already contains this disclosure.

Applicants therefore submit that claims 3-4, 10, 15-16, 20-21, 28-29 and 32-33 are patentable and in condition for allowance.

CONCLUSION

Having addressed all rejections and objections, Applicants respectfully submit that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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